

LG Chemical NBR 6240 High Acrylonitrile Polymer

Category : Polymer , Thermoset , Rubber or Thermoset Elastomer (TSE)

Material Notes:

Description: NBR 6240 is a copolymer of butadiene and acrylonitrile manufactured by advanced emulsion polymerization technology of Goodyear and LG Chem. NBR 6240 is a non staining, medium low mooney, and medium high acrylonitrile polymer designed to aid in processing operations such as extruding and calendaring. NBR 6240 is a low temperature polymerized polymer, and such as, retains the excellent physical and processing properties of a cold nitrile rubber. Applications: NBR 6240 is recommended to use in packings, shoe products, chemically blown sponge, oil field products, industrial and automotive molded parts. CAS No: 9003-18-3 Information provided by LG Chemical

Order this product through the following link:

http://www.lookpolymers.com/polymer_LG-Chemical-NBR-6240-High-Acrylonitrile-Polymer.php

Physical Properties	Metric	English	Comments
Specific Gravity	0.990 g/cc	0.990 g/cc	
Volatiles	0.30 %	0.30 %	
Mooney Viscosity	41 @Temperature 100 Â°C	41 @Temperature 212 Â°F	ML 1+4
Ash	<= 0.50 %	<= 0.50 %	

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	69	69	Cured
	@Temperature 145 Â°C, Time 1190 sec	@Temperature 293 Â°F, Time 0.330 hour	
	73	73	Circulating Oven Aging
	@Temperature 100 Â°C, Time 259000 sec	@Temperature 212 Â°F, Time 72.0 hour	
	45	45	Aged fuel C
	@Treatment Temp. 25.0 Â°C, Time 259000 sec	@Treatment Temp. 77.0 Â°F, Time 72.0 hour	
	69	69	Aged ASTM D #3 Oil
	@Treatment Temp. 100 Â°C, Time 259000 sec	@Treatment Temp. 212 Â°F, Time 72.0 hour	
	73	73	Aged ASTM D #1 Oil
	@Treatment Temp. 100 Â°C, Time 259000 sec	@Treatment Temp. 212 Â°F, Time 72.0 hour	

Mechanical Properties	Metric (Pa)	English (psi)	Comments
Tensile Strength at Break	@Temperature 145 Â°C, Time 1190 sec	@Temperature 293 Â°F, Time 0.330 hour	Cured
	18.9 MPa	2740 psi	Circulating Oven Aging
@Temperature 100 Â°C, Time 259000 sec	@Temperature 212 Â°F, Time 72.0 hour		
	28.3 MPa	4100 psi	cured; ASTM D412
	@Temperature 145 Â°C, Time 2990 sec	@Temperature 293 Â°F, Time 0.830 hour	
	13.4 MPa	1940 psi	Aged fuel C
	@Treatment Temp. 25.0 Â°C, Time 259000 sec	@Treatment Temp. 77.0 Â°F, Time 72.0 hour	
	18.8 MPa	2730 psi	Aged ASTM D #1 Oil
	@Treatment Temp. 100 Â°C, Time 259000 sec	@Treatment Temp. 212 Â°F, Time 72.0 hour	
	18.8 MPa	2730 psi	Aged ASTM D #3 Oil
	@Treatment Temp. 100 Â°C, Time 259000 sec	@Treatment Temp. 212 Â°F, Time 72.0 hour	
Elongation at Break	373.2 %	373.2 %	Circulating Oven Aging
	@Temperature 100 Â°C, Time 259000 sec	@Temperature 212 Â°F, Time 72.0 hour	
	400 %	400 %	Cured
	@Temperature 145 Â°C, Time 1190 sec	@Temperature 293 Â°F, Time 0.330 hour	
	575 %	575 %	cured; ASTM D412
	@Temperature 145 Â°C, Time 2990 sec	@Temperature 293 Â°F, Time 0.830 hour	
	353.1 %	353.1 %	Aged fuel C
	@Treatment Temp. 25.0 Â°C, Time 259000 sec	@Treatment Temp. 77.0 Â°F, Time 72.0 hour	
	372.3 %	372.3 %	Aged ASTM D #1 Oil
	@Treatment Temp. 100 Â°C, Time 259000 sec	@Treatment Temp. 212 Â°F, Time 72.0 hour	
	377 %	377 %	Aged ASTM D #3 Oil
	@Treatment Temp. 100	@Treatment Temp. 212	

Mechanical Properties	°C Metric Time 259000 sec	°F English Time 72.0 hour	Comments
300% Modulus	0.0121 GPa @Temperature 145 °C, Time 2990 sec	1.75 ksi @Temperature 293 °F, Time 0.830 hour	cured; ASTM D412
Rebound	43.1 % @Temperature 30.0 °C	43.1 % @Temperature 86.0 °F	
Abrasion	0.2895	0.2895	AKRON
Compression Set	21.1 % @Temperature 100 °C, Time 259000 sec	21.1 % @Temperature 212 °F, Time 72.0 hour	160°C x 30 min. Cured)

Descriptive Properties	Value	Comments
Bound AN Content	0.34	
Color	Tan	
Components	HAF (IRB#7)	40 phr, ASTM D3187
	NBR 6240	100 phr, ASTM D3187
	Stearic Acid	1 phr, ASTM D3187
	Sulfur	1.5 phr, ASTM D3187
	TBBS	0.7 phr, ASTM D3187
	ZnO	3 phr, ASTM D3187
Compound Recipe	Antioxidant(3-C)	1 phr
	Antioxidant(RD)	2 phr
	Carbon Black(SRF)	80 phr
	CZ	2 phr
	NBR 6240	100 phr
	Plasticizer(DOP)	10 phr
	Stearic Acid	1 phr
	Sulfur	0.5 phr
	TT	1 phr
	Zinc Oxide	5 phr

Descriptive Properties	Value	Comments
Rheometer	1.1 min	t'1, 160Â°C x 12 min, 1Â° Arc, MDR
	1.2 min	t'50, 160Â°C x 12 min, 1Â° Arc, MDR
	1.4 lb-in	ML, 160Â°C x 12 min, 1Â° Arc, MDR
	2.8 min	t'90, 160Â°C x 12 min, 1Â° Arc, MDR
	23.6 lb-in	MH, 160Â°C x 12 min, 1Â° Arc, MDR
Volume Swell	-0.028	Aged ASTM D #3 Oil (100Â°C x 72hrs)
	-0.068	Aged ASTM D #1 Oil (100Â°C x 72hrs)
	0.408	Aged fuel C (RTÂ°C x 72hrs)

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China